

LoRaWAN Miniature Radar Level Sensor



Smart Agriculture, Smart Building, Smart City, Smart Facility, Smart Farm, Smart Factory, Smart Transportation, Smart Utilities

SKU: WSLRW-RLC



Safe Zone



Hazardous Zones

LORAWAN MINIATURE RADAR LEVEL SENSOR WSLRW-RLC



WSLRW-RLC is an affordable and efficient radar level sensor for various liquid applications. This battery-operated device accurately measures levels of chemicals, water, and oil in tanks. Powered by advanced 60GHz Pulse Radar Technology, it provides reliable measurements with minimal power consumption. With 2 x AA batteries, it can operate for up to 10 years (depending on configuration). It supports all LoRaWAN frequency bands Worldwide. It is suitable for remote level monitoring, inventory management, and tracking mobile tanks in various industries.

Applications

Level Monitoring, Process Monitoring, Flood Monitoring, Safety Monitoring, Smart Irrigation, Infrastructure Monitoring

Notes For Applications

Range: Ensure the sensor's range fits the tank height. **Environmental Conditions:** Consider working temperature, pressure, and presence of vapors or dust. **Material Properties:** Consider the material's dielectric constant and any foam, dust, or vapor. **Mounting Options:** Select based on the tank/ structure/ bridge size and shape.



LoRaWAN communication

LoRaWAN communication standard to allow sensor connect to any LoRaWAN Gateway on the market.



High Accuracy & Stable

60GHz Radar technology allow high accuracy and stable



10-Year Battery

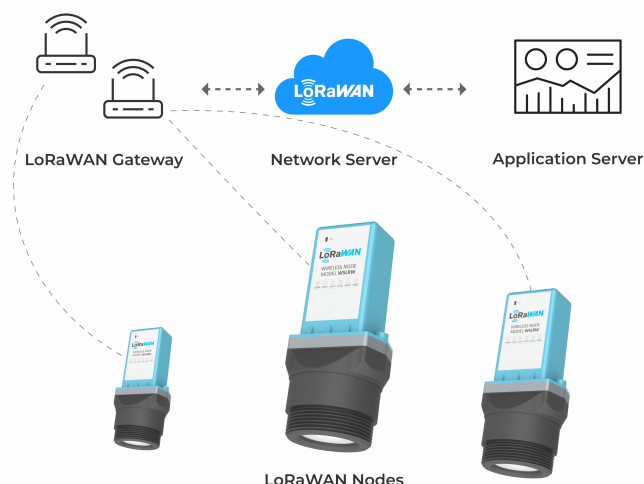
Ultra-low power Radar sensing technology from Daviteq with Ultra-low power wireless technology allow the sensor can last up to 10 years.



IP67 Outdoor

IP67 design for both Indoor and Outdoor applications

LORAWAN MINIATURE RADAR LEVEL SENSOR WSLRW-RLC



SYSTEM ARCHITECTURE

DAVITEQ TECHNOLOGIES INC

Ho Chi Minh City, VN | Koblenz, DE | Melbourne, AU | Zurich, CH

+84.28.6268.2523 / 6268.2524

info@daviteq.com

www.iot.daviteq.com

Created date: Jul-03-2024

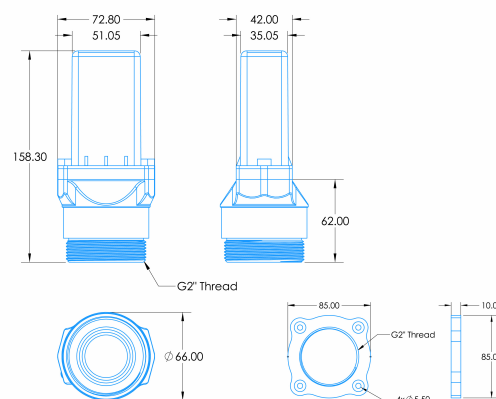
Updated date: Oct-20-2025

Specification

Sensor Technology	Ultra-low powered 60GHz Radar Technology
Measurement range	0.2~18m
Resolution	±1.0mm
Accuracy	±10 mm
Working process temperature	-40~85℃
Working process pressure	vacuum to 1 barg
Sensor sampling rate	configurable from 1 min up to 60 min
Alarm setting	setting the alarm threshold for calculated value
COMMUNICATION	
SF factors	SF7~SF12
Antenna	Internal Antenna 2.0dbi
Battery	02 x AA size 1.5VDC, battery not included
RF Frequency and Power	860~930MHz, 14~20dBm, configurable for zones: EU868, IN865, RU864, KR920, AS923, AU915, US915
Protocol	LoRaWAN® Class A
Data sending modes	Interval time and when alarm occurred
Configuration	via downlink or offline cable (software is free)
Certification	CE and FCC
Working temperature	-15~60℃ (with AA L91 Energizer®)
Dimensions	H180xW50xD40
Net-weight	250g
Housing	Polycarbonate & POM plastic, IP67



LORAWAN MINIATURE RADAR LEVEL SENSOR
WSLRW-RLC



DIMENSION DRAWING OF
WIRELESS NODE (Unit: mm)

LORAWAN MINIATURE RADAR LEVEL SENSOR
WSLRW-RLC



E91 AA
Alkaline battery

-18~60°C working temperature
10-year shelf life
3000 mAh capacity
Price: 1X

Energizer

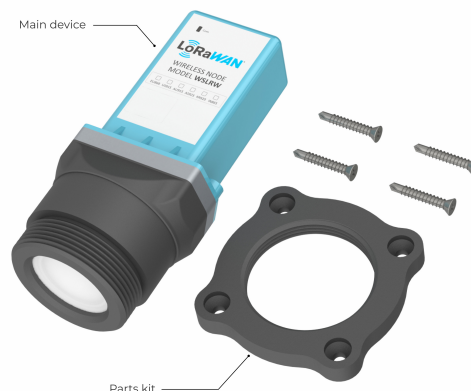


L91 AA
Lithium battery

-40~60°C working temperature
20-year shelf life
3500 mAh capacity
Price: 3.5X

RECOMMENDED BATTERIES
POWERED BY PRIMARY BATTERY

LORAWAN MINIATURE RADAR LEVEL SENSOR
WSLRW-RLC



PRODUCT PACKAGE

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Ordering Information

ITEM CODE	DESCRIPTIONS
WSLRW-RLC-01	LoRaWAN Radar Level Sensor, 0.2 - 18 m Range, Internal antenna, Type AA battery 1.5VDC, IP67, for all LoRa frequency bands, c/w standard mounting bracket